
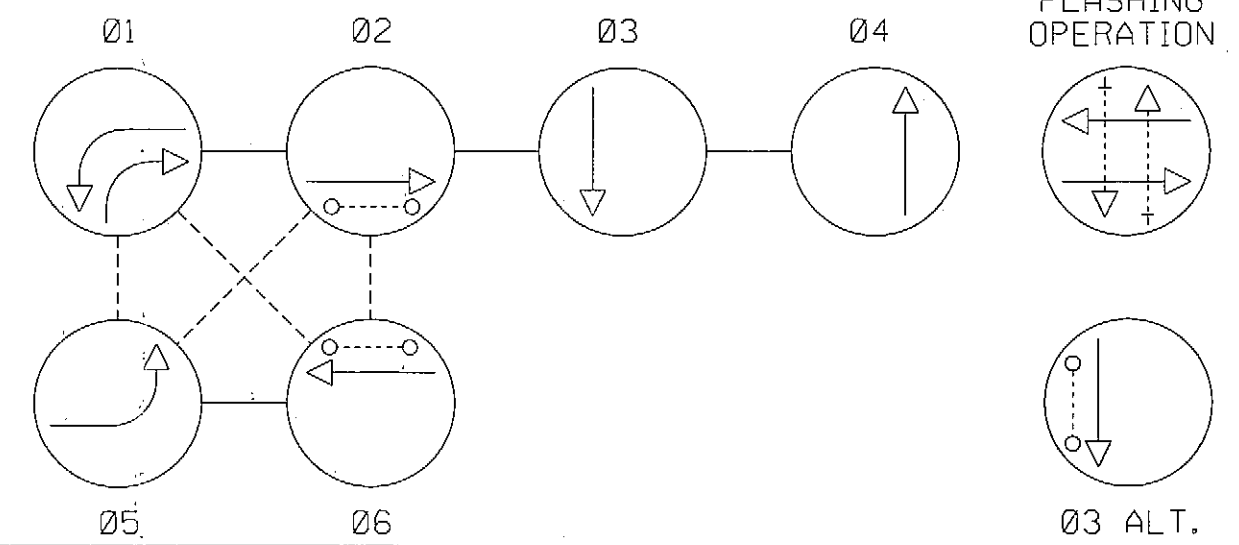


DRILL HOLES

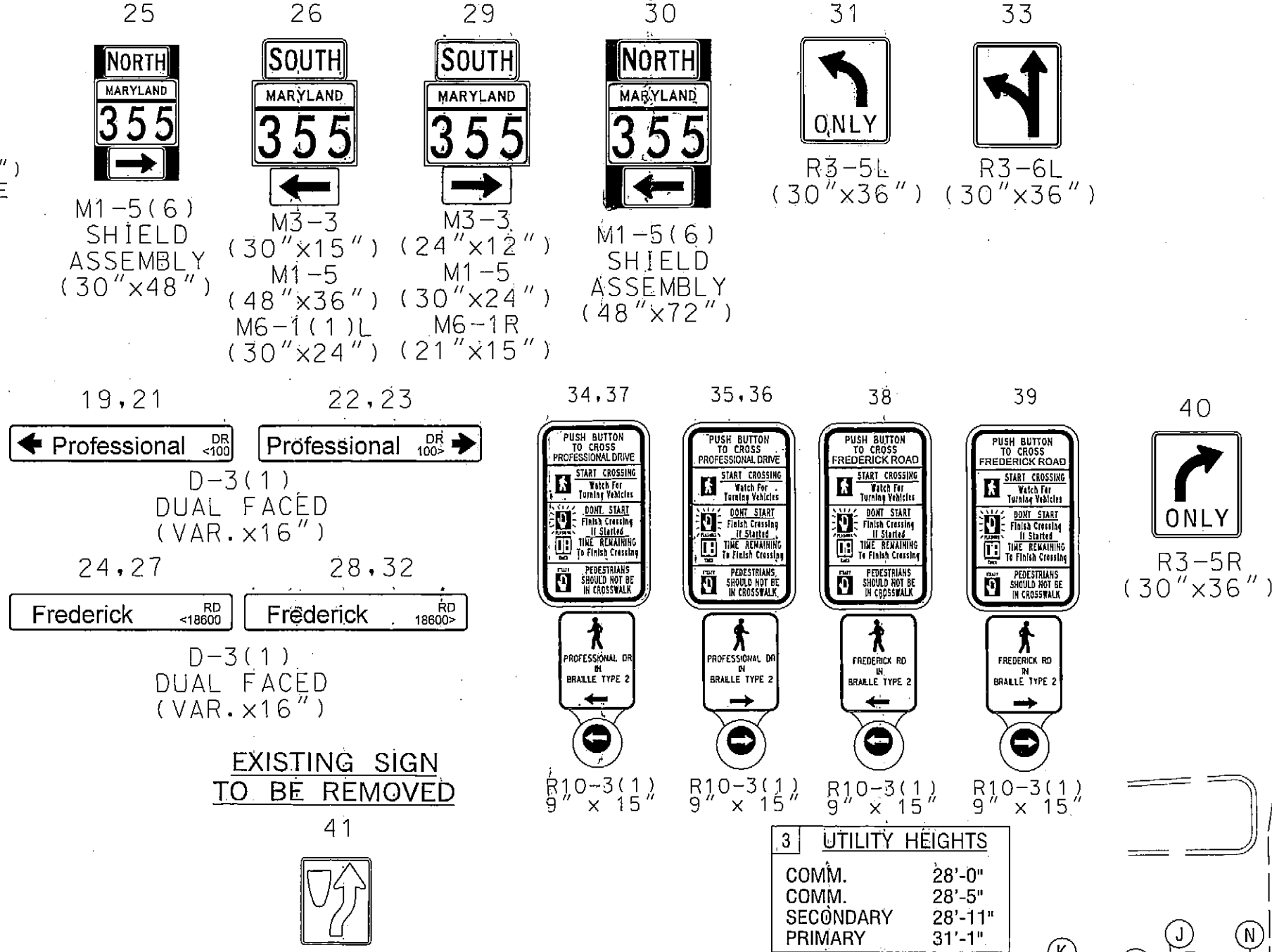
20,40  
  
 R4-7  
 (24"x30")  
 (ROTATE  
 @ 15°)

## FLASHING OPERATION



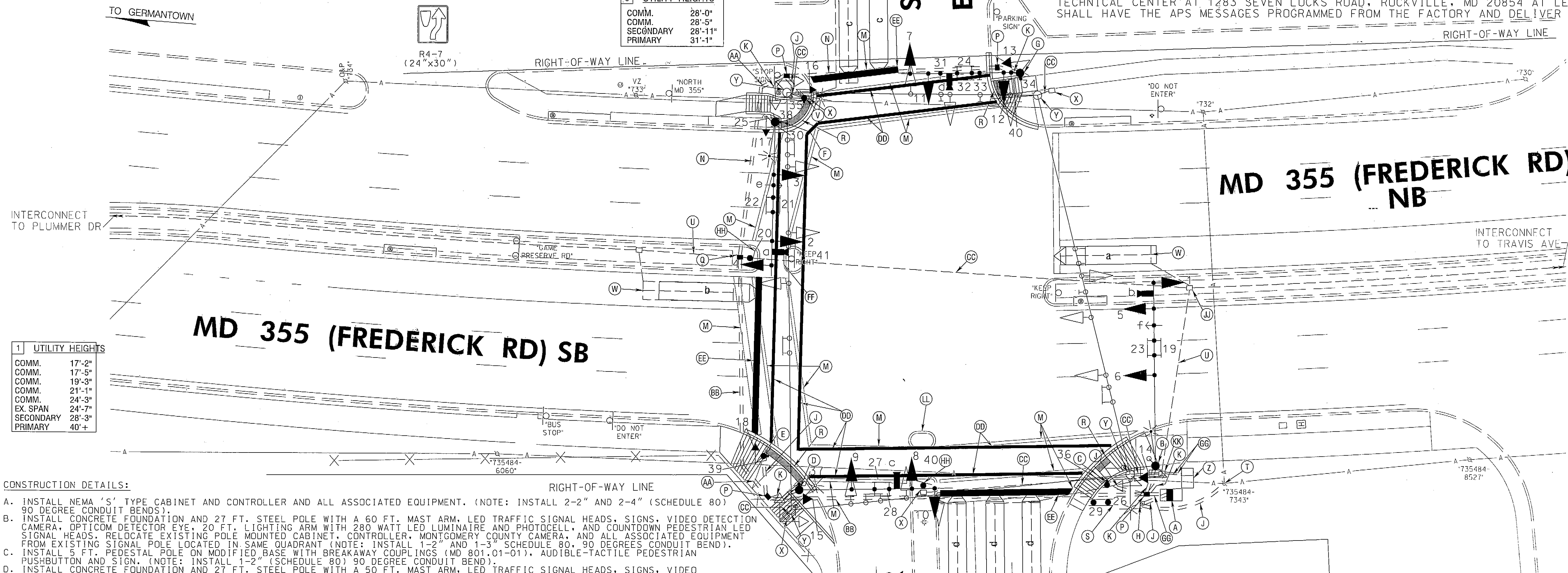
NOTE:  
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

1. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL COORDINATE WITH SHA TRAFFIC OPERATION DIVISION TO CONTACT LOCAL POWER COMPANY TO SET-UP WORK WITH TO DISCONNECT THE EXISTING ELECTRICAL SERVICE AND HAVE THE NEW SERVICE ENERGIZED.



1. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN THE APPROPRIATE 800 SERIES STANDARD PLATES. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. THE CONTRACTOR SHALL MAINTAIN THE CONTINUOUS OPERATION OF ALL INTERCONNECT, VEHICULAR, PEDESTRIAN DETECTORS, AND LIGHTING DEVICES. IF ANY DEVICE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPAIRED WITHIN 72 HOURS BY THE CONTRACTOR AT NO COST TO THE ADMINISTRATION AFTER NOTIFICATION BY THE ENGINEER.
5. MONTGOMERY COUNTY FORCES SHALL RELOCATE THE EXISTING CCTV CABINET, CONTROLLER AND CAMERA. MONTGOMERY COUNTY FORCES SHALL REMOVE THE SIGNAL CONTROLLER. ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATIONS.
6. CONTRACTOR SHALL DELIVER APS PUSHBUTTONS AND CENTRAL CONTROL UNIT TO MR. ROBERT RICKETTS AT MONTGOMERY COUNTY TECHNICAL CENTER AT 1283 SEVEN LOCKS ROAD, ROCKVILLE, MD 20854 AT LEAST 3 WEEKS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL HAVE THE APS MESSAGES PROGRAMMED FROM THE FACTORY AND DELIVER THE APS WAVE FILES TO MR. ROBERT RICKETTS.

7. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE MONTGOMERY COUNTY ENGINEER.
8. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
9. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
10. ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARDS MD 655.11 AND DM 655.12.
11. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALK RAMPS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
12. REFER TO SHEET SG-02 FOR DIMENSIONS OF SIGNAL EQUIPMENT, SIDEWALK RAMPS AND PAVEMENT MARKINGS WITHIN INTERSECTION.
13. REMOVE EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED CROSSWALKS AND STOP LINES.
14. ALL PAVEMENT MARKINGS SHALL BE INSTALLED PER SHA STANDARDS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE SIGNAL CABINET VIDEO INTERFACE EQUIPMENT TO THE MONTGOMERY COUNTY SIGNAL SHOP.
16. CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AND MR. ROBERT RICKETTS 72 HOURS IN ADVANCE OF INTENDED WORK.



A. INSTALL NEMA 'S' TYPE CABINET AND CONTROLLER AND ALL ASSOCIATED EQUIPMENT. (NOTE: INSTALL 2-2" AND 2-4" (SCHEDULE 80) 90 DEGREE CONDUIT BENDS).

B. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, OPTICOM DETECTOR EYE, 20 FT. LIGHTING ARM WITH 280 WATT LED LUMINAIRE AND PHOTOCCELL, AND COUNTDOWN PEDESTRIAN LED SIGNAL HEADS. RELOCATE EXISTING POLE MOUNTED CABINET, CONTROLLER, MONTGOMERY COUNTY CAMERA, AND ALL ASSOCIATED EQUIPMENT TO EXISTING UTILITY POLE FOR SERVICE. INSTALL 3 IN. PVC RISER. COIL 30' OF CABLE AT BASE OF UTILITY POLE. (NOTE: INSTALL 1-2" AND 1-3" SCHEDULE 80) 90 DEGREES CONDUIT BEND).

C. INSTALL 5 FT. PEDESTAL POLE ON MODIFIED BASE WITH BREAKAWAY COUPLINGS (MD 801.01-01), AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN. (NOTE: INSTALL 1-2" (SCHEDULE 80) 90 DEGREE CONDUIT BEND).

D. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN. (NOTE: INSTALL 1-2" AND 1-3" SCHEDULE 80) 90 DEGREES CONDUIT BEND).

E. INSTALL 10 FT. PEDESTAL POLE ON MODIFIED BASE WITH BREAKAWAY COUPLINGS (MD 801.01-01), COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN. (NOTE: INSTALL 1-2" (SCHEDULE 80) 90 DEGREE CONDUIT BEND). TOP OF CONCRETE FOUNDATION TO BE FLUSH WITH SIDEWALK GRADE.

F. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, OPTICOM DETECTOR EYE, 20 FT. LIGHTING ARM WITH 280 WATT LED LUMINAIRE AND PHOTOCCELL, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN, AND COUNTDOWN PEDESTRIAN LED SIGNAL HEADS. (NOTE: INSTALL 1-2" AND 1-3" SCHEDULE 80) 90 DEGREES CONDUIT BEND).

G. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 38 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN, AND COUNTDOWN PEDESTRIAN LED SIGNAL HEADS. (NOTE: INSTALL 1-2" AND 1-3" SCHEDULE 80) 90 DEGREES CONDUIT BEND).

H. INSTALL EMBEDDED METERED SERVICE PEDESTAL. (NOTE: INSTALL 1-2" AND 1-4" 90° CONDUIT BENDS).

J. INSTALL 2 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUIT - TRENCHED.

K. INSTALL 2 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUIT - TRENCHED.

N. REMOVE EXISTING PAVEMENT MARKINGS.

N. INSTALL 4 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUIT - BORED.

P. INSTALL ELECTRICAL HANDHOLE.

Q. CUT INTO EXISTING CONDUIT AND INSTALL PROPOSED ELECTRICAL HANDHOLE ON TOP OF EXISTING CONDUIT AS SHOWN. PULL BACK EXISTING INTERCONNECTIONS TO PROPOSED HANDHOLE PERMITTED TO PROPOSED CABINET.

R. INSTALL PROPOSED RAMP PER DETAIL SHEET SG-02.

S. INSTALL PROPOSED GROUND MOUNTED SIGN(S) ON 2-4"x6" BREAKAWAY WOOD SUPPORTS.

T. USE EXISTING UTILITY POLE FOR SERVICE. INSTALL 3 IN. PVC RISER. COIL 30' OF CABLE AT BASE OF UTILITY POLE.

U. USE EXISTING CONDUIT.

V. INSTALL 10 FT. PEDESTAL POLE ON MODIFIED BASE WITH BREAKAWAY COUPLINGS (MD 801.01-01), COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN. (NOTE: INSTALL 1-2" (SCHEDULE 80) 90 DEGREE CONDUIT BEND).

DD. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING (FOR CROSSWALK).	RIGHT-OF-WAY LINE
EE. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING (FOR STOP LINE).	
FF. REMOVE EXISTING MEDIAN REFUGE. EXISTING "KEEP RIGHT" SIGN AND SUPPORT. BRICK PATHWAY, AND GUTTERPAN. REPLACE DAMAGED PAVEMENT AS REQUIRED.	
GG. INSTALL TWO (2) 4 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUIT - TRENCHED.	
HH. INSTALL PROPOSED GROUND MOUNTED SIGN ON 1-4"x4" BREAKAWAY WOOD SUPPORT.	
II. USE EXISTING HANDHOLE.	
KK. USE EXISTING HANDHOLE. PULL BACK EXISTING INTERCONNECT CABLES TO EXISTING HANDHOLE AND REROUTE TO PROPOSED CABINET.	
LL. REMOVE EXISTING MEDIAN REFUGE, BRICK PATHWAY AND GUTTERPAN. REPLACE DAMAGED PAVEMENT AS REQUIRED.	
	APPROVALS
	REVISIONS

2	UTILITY HEIGHTS
COMM.	20'-10"
COMM.	21'-0"
COMM.	23'-5"
EX. SPAN	25'-4"
COMM.	25'-10"
COMM.	25'-10"
SECONDARY	33'-5"
PRIMARY	40'+

APPROVALS	
TEAM LEADER	
ASST. DIV. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

REVISIONS									
(B) TRAFFIC SIGNAL RECONSTRUCTION APSCPS UPGRADE									
SHA NO. XY1515185			TIMS NO. L803			05/14/2015			
CJW		JVS		BBS		MLR		CJW	
A REBUILD TO NEW GEOMETRICS									
SHA NO. M811-501-371								11/6/1995	
JJD		SR		DLZ		BRK		JH	

PLOTTED: Tuesday, May 14, 2013 AT 01:07 PM  
FILE: T:\173124A-TrafficDesignServices\TRF\112\Plans\PSG-P001 L713 Professional.dgn

===== EXISTIN  
=====

SD	STORM DRAIN
G	GAS MAIN
W	WATER MAIN
S	SEWER MAIN
E	ELECTRIC CABLES
A	AERIAL CABLES
T	TELEPHONE CABLES
F	FIBER-OPTIC

**SHA**

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 355 @ PROFESSIONAL DRIVE

## GAITHERSBURG, MD

## SIGNALIZATION PLAN SHEET

SCALE 1" = 20' DATE OCTOBER 13, 1988 CONTRACT NO. BW-357-802-312

DESIGNED BY D. RENSHAW COUNTY MONTGOMERY  
DRAWN BY C. BUITRAGO LOGMILE 15035515.57  
CHECKED BY D. DODA TMS NO. \_\_\_\_\_  
F.A.P. NO. \_\_\_\_\_ TID NO. \_\_\_\_\_

TS NO. 2517B	DRAWING <b>SG-01</b> OF 03	SHEET NO. 01 OF 03
--------------	----------------------------	--------------------